Appendix E Potential Prevention and Restoration Strategies for Watersheds

Title	Bibliographic Information	Description
Nonpoint Sources		
Agriculture		
Best Management Practices for Colorado Agriculture: An Overview	R.M. Waskom. 1994. Best Management Practices for Colorado Agriculture: An Overview. Colorado State University Cooperative Extension.	Best management practices (BMPs) for agriculture, including source controls, structural controls, cultural practices, and other management practices. No real technology-based BMPs; all prevention and pollution reduction/mitigation techniques.
Best Management Practices for Agricultural Pesticide Use	R.M. Waskom. 1995. <i>Best Management Practices for Agricultural Pesticide Use</i> . Colorado State University Cooperative Extension.	BMPs for pesticide use related to pesticide selection, application, and safety. Also includes information on the predicted mobility (surface runoff and leaching) of certain commonly used pesticides. No real technology-based BMPs; all prevention and pollution reduction/mitigation techniques.
Best Management Practices for Crop Pests	R.M. Waskom. 1995. Best Management Practices for Crop Pests. Colorado State University Cooperative Extension.	BMPs for crop management, including general crop management, weed management, insect management, and disease management. General focus is integrated pest management techniques, including no chemical techniques. No real technology-based BMPs; all prevention and pollution reduction/mitigation techniques.
Best Management Practices for Manure Utilization	R.M. Waskom. 1994. <i>Best Management Practices for Manure Utilization</i> . Colorado State University Cooperative Extension.	BMPs for the use of manure on croplands, including general BMPs as well as application and storage BMPs. Includes some calculation techniques for the amount and timing of application. No real technology-based BMPs; all prevention and pollution reduction/mitigation techniques.

Title	Bibliographic Information	Description
Best Management Practices for Nitrogen Fertilization	R.M. Waskom. 1994. Best Management Practices for Nitrogen Fertilization. Colorado State University Cooperative Extension.	BMPs for the use of nitrogen fertilizer on crops, including general BMPs as well as application and fertilizer handling and storage BMPs. Includes some calculation techniques for the amount and timing of application. No real technology-based BMPs; all prevention and pollution reduction/mitigation techniques.
Best Management Practices for Phosphorus Fertilization	R.M. Waskom. 1994. Best Management Practices for Phosphorus Fertilization. Colorado State University Cooperative Extension.	General BMPs for the use of phosphorus fertilizer on crops. No real technology-based BMPs; all prevention and pollution reduction/mitigation techniques.
Best Management Practices for Irrigation Management	R.M. Waskom. 1994. Best Management Practices for Irrigation Management. Colorado State University Cooperative Extension.	BMPs for irrigation, including general BMPs as well as flood or furrow irrigation, sprinkler irrigation, and chemigation and fertigation. Includes some calculation techniques for the amount and timing of irrigation. References some technological and non-technological techniques for determining when and how much to irrigate.
CORE4 Conservation Practices Training Guide: The Common Sense Approach to Natural Resource Conservation	U.S. Department of Agriculture. 1999. CORE4 Conservation Practices Training Guide: The Common Sense Approach to Natural Resource Conservation. U.S. Department of Agriculture, Natural Resources Conservation Service, Washington, D.C.	Discusses the use of conservation tillage, nutrient management, pest management, and conservation buffers in agricultural settings. These practices are used mainly to reduce nonpoint sources of pollution from cropland as well as to provide opportunities for other conservation benefits when applied as a system.
Mining		
Best Practices in Abandoned Mine Land Reclamation: The Reclamation of Post Mining Activities	Colorado Division of Minerals and Geology. 2002. Best Practices in Abandoned Mine Land Reclamation: The Reclamation of Post Mining Activities. State of Colorado Department of Natural Resources, Division of Minerals and Geology, Denver, Colorado.	BMPs specifically used in abandoned mining situations, including erosion control, landscaping, vegetation, sulfate-reducing wetlands, sedimentation/aeration ponds, oxidation wetlands, treatment, barriers, plugs, and structural seals. Includes both "green" elements and "non-green" elements.

Title	Bibliographic Information	Description
Best Management Practices for Mining in Idaho	Idaho Department of Lands. 1992. Best Management Practices for Mining in Idaho. Idaho Department of Lands, Boise, Idaho.	Handbook discussing BMPs for surface dredge and placer mining to help minimize nonpoint source water quality impacts and enhance the natural recovery of the mined location. Specifically addresses water quality impacts related to increased sedimentation, as well as impacts from transportation of hazardous materials and naturally occurring heavy metals or other released elements from mining.
Forestry		
Colorado Forest Stewardship Guidelines to Protect Water Quality: Best Management Practices (BMPs) for Colorado	Colorado Timber Industry Association and Colorado State Forest Service. 1998. Colorado Forest Stewardship Guidelines to Protect Water Quality: Best Management Practices (BMPs) for Colorado. Colorado Timber Industry Association, Durango, CO. Colorado State Forest Service, Fort Collins, Colorado.	BMPs particularly related to logging and timber practices, including road use, construction, and drainage; streamside management; wildfire use and reclamation; timber harvesting, design, and management; pesticide and fertilizer use; and stream crossing design and crossings. Most BMPs are related to sediment and erosion control while harvesting timber. No real technology-based BMPs; all prevention and pollution reduction/mitigation techniques.
Silviculture Best Management Practices	Florida Department of Agriculture and Consumer Services. 2003. <i>Silviculture Best Management Practices</i> . Florida Department of Agriculture and Consumer Services, Division of Forestry, Tallahassee, Florida.	Manual that establishes the BMPs for silviculture operations in Florida. These practices are designed as the minimum standards necessary for protecting and maintaining the state's water quality, as well as certain wildlife habitat values, representing a balance between overall natural resource protection and forest resource use. The practices were developed specifically for silviculture and are intended to be applied on all such operations.

Title	Bibliographic Information	Description
Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers and Resource Managers	Minnesota Forest Resources Council. 2005. Sustaining Minnesota Forest Resources: Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers and Resource Managers. Minnesota Forest Resources Council, St. Paul, Minnesota.	Manual that provides a set of integrated voluntary guidelines that address projected impacts on forest resources with a focus on sustainable forestry. Addresses riparian and other water considerations as well as general forestry considerations. Encourages informed decision-making that takes into account resource needs, landowner objectives, site capabilities, existing regulations, and economics.
Recreation		
Guidelines for Water Quality Enhancement at Golf Courses Through the Use of Best Management Practices	Wright Water Engineers, Inc., and Denver Regional Council of Governments. 1996. Guidelines for Water Quality Enhancement at Golf Courses through the Use of Best Management Practices. Prepared by Wright Water Engineers, Inc., and Denver Regional Council of Governments for the Colorado Nonpoint Source Task Force, Denver, Colorado.	Provides guidelines to the golf industry on BMPs that help to minimize potential adverse impacts associated with golf courses, which can include effects on hydrologic and water quality; changes to stormwater patterns and quantity impacting habitat, groundwater, and soil conditions and other aspects; and changes to the surface and groundwater quality. Focus on green elements in BMPs for design, construction, and maintenance.
Mountain Driveway Best Management Practices Manual	Wright Water Engineers, Inc., and Denver Regional Council of Governments. 1999. <i>Mountain Driveway Best Management Practices Manual</i> . Prepared by Wright Water Engineers, Inc., and Denver Regional Council of Governments for the Colorado Nonpoint Source Council, Denver, Colorado.	Driveways in mountainous areas can be sources of sediment, oil, grease, household chemicals, lawn amendments (nutrients), and de-icers (salts) that can run off into streams. Green BMPs are specifically addressed throughout the manual.

Title	Bibliographic Information	Description
Hydromodification		
Hydrologic Modifications Best Management Practices: Wyoming Nonpoint Source Management Plan	Wyoming Department of Environmental Quality. 1999. <i>Hydrologic Modifications Best Management Practices: Wyoming Nonpoint Source Management Plan</i> . Wyoming Department of Environmental Quality, Water Division, Cheyenne, Wyoming.	Includes 15 BMPs specifically for hydrological modification operations. The BMPS are designed to protect specific stream banks from the erosive forces of an active channel while conducting other construction-type activities within or adjacent to stream channels.
National Management Measures to Control Nonpoint Source Pollution from Hydromodification	U.S. Environmental Protection Agency. 2007. <i>National Management Measures to Control Nonpoint Source Pollution from Hydromodification</i> . EPA 841-B-07-002. U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds, Washington, D.C.	Addresses BMPs for different types of hydromodification in streams, including dredging, straightening, and, in some cases, complete stream relocation. Also addresses BMPs for construction in or along streams, construction and operation of dams and impoundments, channelization in streams, dredging, and land reclamation activities.
Hydromodification Management Plan	Brown and Caldwell. 2009. Hydromodification Management Plan. Prepared by Brown and Caldwell for the County of San Diego, California.	The San Diego, California, Regional Water Quality Control Board's Order R9-2007-0001 requires the implementation of a Hydromodification Management Plan (HMP) for all priority development projects. HMP advocates the use of low-impact development (LID) design approaches to provide both treatment and flow control to meet hydromodification criteria. A variety of LID-based flow-control methods, including bioretention basins, flow-through planter boxes, and bioretention systems in combination with cisterns and vaults, are discussed.
Managing Runoff to Protect Natural Streams: The Latest Developments on Investigation and Management of Hydromodification in California	E.D. Stein and S. Zaleski. 2005. Managing Runoff to Protect Natural Streams: The Latest Developments on Investigation and Management of Hydromodification in California. Southern California Coastal Water Research Project and University of Southern California Sea Grant, Los Angeles, California.	Discusses techniques for addressing hydromodification through a suite of strategies, including site design, onsite controls, regional controls, instream controls, and restoration of degraded stream systems. In addition, hydromodification management can be integrated into a multi-objective strategy that addresses hydrology, water quality, flood control, and stream ecology.

Title	Bibliographic Information	Description
Stream Restoration		
The Virginia Stream Restoration & Stabilization Best Management Practices Guide	Virginia Department of Conservation and Recreation. 2004. The Virginia Stream Restoration & Stabilization Best Management Practices Guide. Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation, Richmond, Virginia.	Includes design guidelines, costs, and BMPs for stream stabilization and restoration. Most of the BMPs can be considered green practices.
Stream Corridor Restoration: Principles, Processes, and Practices	The Federal Interagency Stream Restoration Working Group. 2001. Stream Corridor Restoration: Principles, Processes, and Practices. GPO Item No. 0120-A. The Federal Interagency Stream Restoration Working Group, Washington, D.C.	Addresses stream corridor restoration with the goal of establishing self-sustaining stream functions. The guidance applies nationwide in both urban and rural settings and can be used for a range of stream types and sizes, as well as rivers too small to be navigable by barges. A range of simple to complex practices, including both landscape-and stream-based practices.
Stream Corridor Protection and Restoration	Chesapeake Bay Program. 1997. Stream Corridor Protection and Restoration. Chesapeake Bay Program, Annapolis, MD.	Discusses stream corridor protection options for local governments, especially those in the Chesapeake Bay area.
Urban		
Every Drop Counts: Environmentally Sound Technologies for Urban and Domestic Water Use Efficiency	United Nations Environment Programme. 2008. Every Drop Counts: Environmentally Sound Technologies for Urban and Domestic Water Use Efficiency. United Nations Environment Programme, Division of Technology, Industry, and Economics—International Environmental Technology Centre.	Pages 43–157 include what United Nations Environment Programme (UNEP) calls Environmentally Sound Technologies. The technologies include both "hard" and "soft" technologies. Document addresses multiple "green elements" for water storage, supply and distribution, use and saving, reuse, recycling, and safe disposal.
Managing Wet Weather with Green Infrastructure: Funding Options	U.S. Environmental Protection Agency. 2008. <i>Managing Wet Weather with Green Infrastructure: Funding Options</i> . EPA 833-F-08-007. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Discusses funding options for green infrastructure stormwater management, including fees, loans, and grants. Discusses green projects and includes case studies implementing a combination of green technologies and practices to reach different goals.

Title	Bibliographic Information	Description
Managing Wet Weather with Green Infrastructure: Green Streets	U.S. Environmental Protection Agency. 2008. <i>Managing Wet Weather with Green Infrastructure: Green Streets</i> . EPA 833-F-08-009. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Discusses green elements such as street designs, bioretention practices, swales, permeable pavement, sidewalk trees, and other technologies and techniques to address certain stormwater pollutants from vehicles. Specifically targets trash, sediment/soil, metals, petroleum organics, and nutrients.
Managing Wet Weather with Green Infrastructure: Incentive Mechanisms	U.S. Environmental Protection Agency. 2009. <i>Managing Wet Weather with Green Infrastructure: Incentive Mechanisms</i> . EPA 833-F-09-001. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Discusses incentive mechanisms for using green stormwater control measures, including stormwater fee discounts, development incentives, grants, rebates, installation financing, and awards and recognition programs. Provides numerous case study examples of the types of technologies and combinations of technologies used to provide incentives for green stormwater management.
Managing Wet Weather with Green Infrastructure: Green Infrastructure Retrofit Policies	U.S. Environmental Protection Agency. 2008. <i>Managing Wet Weather with Green Infrastructure: Green Infrastructure Retrofit Policies</i> . EPA 833-F-08-008. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Presents retrofitting techniques, technologies, and policies for stormwater management, including green roofs, downspout and impervious cover disconnection, permeable pavement, public property retrofits (green alleys), private property retrofits (permeable pavement, rain barrels, etc.), bioretention, offset program, green lots, vacant lot stabilizations, and stormwater offsets. Also includes case studies of combinations of techniques.
Water and Waste Water Reuse: An Environmentally Sound Approach for Sustainable Urban Water Management	United Nations Environment Programme. 2005. Water and Waste Water Reuse: An Environmentally Sound Approach for Sustainable Urban Water Management. United Nations Environment Programme, Division of Technology, Industry, and Economics – International Environmental Technology Centre.	Discusses wastewater reuse applications and opportunities as well as building capacity for water and wastewater reuse. Also defines environmentally sound technologies.

Title	Bibliographic Information	Description
Protecting Water Resources with Smart Growth	U.S. Environmental Protection Agency. 2004. <i>Protecting Water Resources with Smart Growth</i> . EPA 231-R-04-002. U.S. Environmental Protection Agency, Washington, D.C.	Discusses the protection of water resources at the regional scale through development in strategic areas, funding, regulation, and education and the protection of water resources on the site-level scale though planning, technologies, ordinances, and education. Includes information on sewer planning and combined sewer systems.
Smart Growth for Clean Water: Helping Communities Address the Water Quality Impacts of Sprawl	National Association of Local Government Environmental Professionals, Trust for Public Land, ERG. 2003. Smart Growth for Clean Water: Helping Communities Address the Water Quality Impacts of Sprawl. National Association of Local Government Environmental Professionals, Washington, D.C.	Discusses land conservation, brownfields redevelopment, urban and community forestry, LID, and watershed management as they relate to water quality and urban sprawl.
Growth & Water Resources: The Link Between Land Use and Water Resources	U.S. Environmental Protection Agency. 2005. <i>Growth & Water Resources:</i> The Link Between Land Use and Water Resources. Fact Sheet. EPA 842-F-02-008. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Fact sheet discussing the effect of development on water resources, including increased impervious surfaces, increased pollutant loadings, increased pollutants from construction activities, and increases in surface runoff.
Using Smart Growth Techniques as Stormwater Best Management Practices	U.S. Environmental Protection Agency. 2005. <i>Using Smart Growth Techniques as Stormwater Best Management Practices</i> . EPA 231-B-05-002. U.S. Environmental Protection Agency, Office of Water and the Office of Policy, Economics, and Innovation, Washington, D.C.	Focuses on communities that have adopted smart growth policies and plans recognizing the water benefits of the smart growth techniques implemented. Also provides suggestions of ways to integrate smart growth policies into stormwater planning and compliance.
Protecting Water Resources with Higher-Density Development	U.S. Environmental Protection Agency. 2006. <i>Protecting Water Resources with Higher-Density Development</i> . EPA 231-R-06-001. U.S. Environmental Protection Agency, Development, Community and Environment Division, Washington, D.C.	Compares low-density development and high-density development in terms of protecting water resources. Higher densities might better protect water quality— especially at the lot and watershed levels—and might be one strategy communities can use to minimize regional water quality impacts.
Urban Stormwater BMP Performance Monitoring	Geosyntec Consultants and Wright Water Engineers, Inc. 2009. <i>Urban Stormwater BMP Performance Monitoring</i> . Water Environment Research Federation, Alexandria, Virginia.	Manual that provides a recommended set of protocols and standards for stormwater BMP monitoring data and provides monitoring guidance for LID strategies at the overall site level.

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Title	Bibliographic Information	Description
An Integrated Framework To Restore Small Urban Watersheds (Urban Subwatershed Restoration Manual No. 1)	T. Schueler. 2005. <i>An Integrated Framework to Restore Small Urban Watersheds</i> . Urban Subwatershed Restoration Manual No. 1. Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C.	Manual 1 covers the basic concepts and techniques of urban watershed restoration, includes subwatershed classification system to define expected stream impacts and restoration potential, and defines seven broad groups of restoration practices.
Methods to Develop Restoration Plans for Small Urban Watersheds (Urban Subwatershed Restoration Manual No. 2)	T. Schueler and A. Kitchell. 2005. <i>Methods to Develop Restoration Plans for Small Urban Watersheds</i> . Urban Subwatershed Restoration Manual No. 2. Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C.	Manual 2 provides guidance on developing a plan to restore urban subwatersheds, including analysis, field assessment, and stakeholder involvement methods used to make critical restoration management decisions.
Urban Stormwater Retrofit Practices (Urban Subwatershed Restoration Manual No. 3)	T. Schueler, D. Hirschman, M. Novotney, and J. Zielinski, P.E. 2007. <i>Urban Stormwater Retrofit Practices</i> . Urban Subwatershed Restoration Manual No. 3. Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C.	Manual 3 provides information on stormwater retrofit practices that can capture and treat stormwater runoff before it is delivered to a stream, including off-site storage and on-site retrofit techniques.
Urban Stream Repair Practices (Urban Subwatershed Restoration Manual No. 4)	T. Schueler, and K. Brown. 2004. <i>Urban Stream Repair Practices</i> . Urban Subwatershed Restoration Manual No. 4. Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C.	Manual 4 includes information on practices used to enhance the appearance, stability, structure, or function of urban streams. The manual also offers guidance on approaches to urban stream repair.
Pollution Source Control Practices (Urban Subwatershed Restoration Manual No. 8)	T. Schueler, C. Swann, T. Wright, and S. Sprinkle. 2005. <i>Pollution Source Control Practices</i> . Urban Subwatershed Restoration Manual No. 8. Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C.	Manual 8 addresses pollution source control practices to reduce or prevent pollution from residential neighborhoods or stormwater hotspots. It includes information on stewardship and pollution prevention practices, as well as methods to assess subwatershed pollution sources to develop and target education and/or enforcement efforts.

Title	Bibliographic Information	Description
Municipal Pollution Prevention/ Good Housekeeping Practices (Urban Subwatershed Restoration Manual No. 9)	M. Novotney and R. Winer. 2008. <i>Municipal Pollution Prevention/Good Housekeeping Practices</i> . Urban Subwatershed Restoration Manual No. 9. Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C.	Manual 9 includes information on municipal programs that can directly support subwatershed restoration efforts. Includes improved street and storm drain maintenance practices, development/redevelopment standards, stewardship of public land, delivery of municipal stewardship services, and watershed education and enforcement.
Unified Stream Assessment: A User's Manual (Urban Subwatershed Restoration Manual No. 10)	A. Kitchell and T. Schueler. 2005. <i>Unified Stream Assessment: A User's Manual</i> . Urban Subwatershed Restoration Manual No. 10. Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C.	Manual 10 describes the Unified Stream Assessment (USA) technique to locate and evaluate problems and restoration opportunities within the urban stream corridor. Includes information on how to perform a USA and interpret the data collected.
Unified Subwatershed and Site Reconnaissance: A User's Manual (Urban Subwatershed Restoration Manual No. 11)	T.C. Wright, C. Swann, K.Cappiella, and T. Schueler. 2005. <i>Unified Subwatershed and Site Reconnaissance: A User's Manual</i> . Urban Subwatershed Restoration Manual No. 11. Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Water Management, Washington, D.C.	Manual 11 addresses pollution sources and restoration potential within upland areas of urban subwatersheds, including guidance on how to perform the Neighborhood Source Assessment, Hotspot Site Investigation, Pervious Area Assessment and the analysis of Streets and Storm Drains.
Urban Stormwater Management in the United States	National Research Council. 2008. Urban Stormwater Management in the United States. National Research Council, Water Science and Technology Board, Division on Earth and Life Studies, Washington, D.C.	Paper that discusses urbanization and stormwater in terms of the challenges in regulating stormwater, the effects of urbanization on watersheds, monitoring and modeling, stormwater management approaches, and innovative stormwater management and regulatory permitting.
Low Impact Development (LID): A Literature Review	U.S. Environmental Protection Agency. 2000. Low Impact Development (LID): A Literature Review. EPA 841-B-00-005. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Literature review discussing the availability and reliability of data to assess the effectiveness of LID. Addresses the availability of information on background, maintenance, and effectiveness. Also includes information on specific LID practices.

Title	Bibliographic Information	Description
Sustainable Critical Infrastructure Systems: A Framework for Meeting 21st Century Imperatives	National Research Council. 2009. Sustainable Critical Infrastructure Systems: A Framework for Meeting 21st Century Imperatives. Toward Sustainable Critical Infrastructure Systems: Framing the Challenges Workshop Committee; National Research Council, Washington, D.C.	Discusses the development of sustainable critical infrastructure systems, including water and wastewater facilities. Also discusses the connectivity between other critical infrastructure systems.
Developing a Sustainable Community: A Guide to Help Connecticut Communities Craft Plans and Regulations that Protect Water Quality	J. Rozum. 2009. Developing a Sustainable Community: A Guide to Help Connecticut Communities Craft Plans and Regulations that Protect Water Quality. University of Connecticut Center for Land Use Education and Research (CLEAR), Haddam, Connecticut.	Discusses more sustainable approaches to development with a focus on water quality. Focuses on stormwater management through green practices related to residential streets and parking, lot development practices, and conservation of natural areas.
Addressing Imperviousness In Plans, Site Design and Land Use Regulations	J. Gibbons. 1998. Addressing Imperviousness In Plans, Site Design and Land Use Regulations. University of Connecticut Cooperative Extension System (CES), Storrs, Connecticut.	Paper that discusses the potential impact of land uses and planning on water resources. Addresses community planning related to water resources in terms of land use trends, topography, soils, open space, watersheds, community design, public utilities, transportation, build-out scenarios, stormwater management, aquifers, and regulations.
Impervious Surface Coverage, The Emergence of a Key Environmental Indicator	C.L. Arnold and C.J. Gibbons. 1996. Impervious Surface Coverage: The Emergence of a Key Environmental Indicator. <i>Journal of the American Planning Association</i> 62(2): 243–258.	Article on the use of impervious surface coverage as a quantifiable land-use indicator of water resource protection and polluted runoff. Also discusses strategies to reduce the impacts of impervious surfaces and associated water resource impacts.
Green Infrastructure in Arid and Semi-Arid Climates	U.S. Environmental Protection Agency. 2010. <i>Green Infrastructure in Arid and Semi-Arid Climates</i> . EPA 833-B-10-002. U.S. Environmental Protection Agency, Washington, D.C.	Case study looking at green infrastructure from a stormwater management perspective, focusing on areas in the western part of the United States with arid and semiarid climates.

Title	Bibliographic Information	Description
State and Local Agencies Turn Focus to Promoting Renewable Energy from Dairy Waste Throughout the Central Valley.	California Environmental Protection Agency. 2010. State and Local Agencies Turn Focus to Promoting Renewable Energy from Dairy Waste Throughout the Central Valley. <i>California Water News</i> . California Regional Water Quality Control Board, Central Valley Region, Sacramento, California.	Summarizes various green infrastructure practices, including their benefits and how they can be used in the arid climate of the western United States.
Building Green: A Success Story in Philadelphia	U.S. Environmental Protection Agency. 2010. <i>Building Green: A Success Story in Philadelphia</i> . Video. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Video discussing the use of green infrastructure techniques in Philadelphia, focusing on Onion Flatts, LLC, and its creation and development of buildings with high energy and water efficiency.
Reduce Runoff: Slow it Down, Spread it Out, Soak it In	U.S. Environmental Protection Agency and U.S. Botanic Garden. 2008. Reduce Runoff: Slow it Down, Spread it Out, Soak it In. Video. U.S. Environmental Protection Agency and U.S. Botanic Garden, Washington, D.C.	Video highlighting green techniques such as rain gardens, green roofs, and rain barrels to help manage stormwater runoff. Especially focuses on the concept of mimicking natural water systems.
Nonpoint Source News-Notes, June 2010, Issue No. 90	U.S. Environmental Protection Agency. 2010. <i>Nonpoint Source News-Notes</i> . June 2010, Issue No. 90. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Newsletter with articles on LID, green technologies for dealing with stormwater in an urban setting, green roofs, and wetlands restoration.
Climate Change and Urban Water Resources: Investing for Reliability	California Urban Water Agencies. 2007. Climate Change and Urban Water Resources: Investing for Reliability. California Urban Water Agencies, Sacramento, CA.	Report that describes the primary issues and concerns regarding climate change and showcases actions taken by urban drinking water utilities to invest in the nation's water supply future.
Green Roofs: Stormwater Management and Urban Heat Island Mitigation	J.T. Berner. 2010. Green Roofs: Stormwater Management and Urban Heat Island Mitigation. U.S. Environmental Protection Agency webcast presentation, June 8, 2010. Washington, D.C.	Webcast presentation for U.S. Environmental Protection Agency (EPA) on stormwater quality impacts, green roofs, stormwater benefits of green roofs, applications of green roofs, and tools and resources for green roofs.
Designing LID to Work: Lessons Learned from North Carolina	D. Jones (North Carolina State University, Cooperative Extension) and Heather Burkert (H. Burkert and Company). 2010. Designing LID to Work: Lessons Learned from North Carolina. EPA Watershed Academy webcast presentation, December 9, 2010. Washington, D.C.	Webinar presentation on the uses of LID in the diverse geography of North Carolina, including mountains, piedmont, and coastal areas.

Title	Bibliographic Information	Description
Low Impact Development: A Guidebook for North Carolina	North Carolina Cooperative Extension. 2009. Low Impact Development: A Guidebook for North Carolina. AG-716. North Carolina Cooperative Extension Service, North Carolina State University.	Guidebook on LID techniques. The guidebook provides information for professionals, government officials, and others on LID approaches to land development and stormwater management.
Rainwater and Storm	water Control and Management	
Green Industry Best Management Practices (BMPs) for the Conservation and Protection of Water Resources in Colorado: Moving Toward Sustainability	Wright Water Engineers, Inc. 2008. <i>Green Industry Best Management Practices (BMPs) for the Conservation and Protection of Water Resources in Colorado: Moving Toward Sustainability</i> . Prepared for The Green Industries of Colorado (GreenCO) by Wright Water Engineers, Inc., Denver, Colorado.	Describes green industry BMPs for the conservation of water resources and protection of water quality, with a focus on sustainable landscaping practices. BMPs include a variety of design, installation, maintenance, grower, and retail practices related to landscaping practices.
Managing Stormwater to Protect Water Resources in Mountainous Regions of Colorado	Colorado Geological Survey. 2009. Managing Stormwater to Protect Water Resources in Mountainous Regions of Colorado. Prepared for Clear Creek County by Ralph Topper, CPG, Colorado Geological Survey.	Describes stormwater management techniques and technologies including predevelopment non-structural controls (land use planning, LID) and structural BMPs (filtration, infiltration, detention, flow control). There is also discussion of practices particularly for the mountainous regions of Colorado. Fact sheets are divided by filtration techniques and technologies, infiltration techniques and technologies, detention techniques and technologies, and flow control techniques and technologies. Most techniques and technologies have "green" elements.
Managing Wet Weather with Green Infrastructure: Rainwater Harvesting Policies	U.S. Environmental Protection Agency. 2008. <i>Managing Wet Weather with Green Infrastructure: Rainwater Harvesting Policies</i> . EPA 833-F-08-010. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Discusses rainwater harvesting in terms of codes and regulations, end uses and treatment standards, required system components, permitting, maintenance, and rates of use. Includes case studies of different technologies and techniques and their associated uses for the rainwater.

Title	Bibliographic Information	Description
Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices	U.S. Environmental Protection Agency. 2007. <i>Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices.</i> EPA 841-F-07-006. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Cost comparisons between LID and traditional stormwater management practices (especially combined sewer overflow control). Includes some discussion of the ancillary benefits of LID, including environmental benefits and land value and quality of life benefits. Discusses 17 case studies with different combinations of LID practices and their associated cost comparisons.
Managing Wet Weather with Green Infrastructure: Water Quality Scorecard	U.S. Environmental Protection Agency. 2009. <i>Managing Wet Weather with Green Infrastructure: Water Quality Scorecard</i> . EPA 833-F-09-004. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Water quality scorecard to determine different opportunities for green practices to manage stormwater. Also includes case studies for green stormwater management strategies at the municipal, neighborhood, and site scales.
Natural Security: How Sustainable Water Strategies Are Preparing Communities for a Changing Climate	W. Hewes and K. Pitts. 2009. <i>Natural Security: How Sustainable Water Strategies Are Preparing Communities for a Changing Climate</i> . American Rivers, Washington, D.C.	Provides case studies of communities using green infrastructure and green technologies to address problems, including public health, flood damage, clean water supply, and enhanced livability.
Catching the Rain: A Resource Guide for Natural Stormwater Management in the Southeast	G. Belan and B. Otto. 2008. Catching the Rain: A Resource Guide for Natural Stormwater Management in the Southeast. American Rivers, Washington, D.C.	Discusses natural stormwater management practices such as bioretention, rain gardens, dry swales, wet swales, filter strips, urban stream buffers, urban trees, infiltration basins, constructed wetlands, green roofs, rain barrels, dry wells, porous pavement, and green roads and parking.
The Greening of Stormwater: Michigan Communities Saving Money, Beautifying Neighborhoods, and Protecting Lakes and Streams	D. Dempsey. 2006. The Greening of Stormwater: Michigan Communities Saving Money, Beautifying Neighborhoods, and Protecting Lakes and Streams. Clean Water Fund, American Rivers, Washington, D.C.	Discusses stormwater management practices related to combined sewer overflow prevention and LID. Discusses practices implemented in several model communities.

Title	Bibliographic Information	Description
Stormwater Guidelines for Green, Dense Redevelopment: Stormwater Quality Solutions for the City of Emeryville	Community Design + Architecture. 2005. Stormwater Guidelines for Green, Dense Redevelopment: Stormwater Quality Solutions for the City of Emeryville. Community Design + Architecture, Oakland, California.	Specifically focused on the City of Emeryville, California, which is a heavily urbanized area with compacted and some contaminated soils and a high water table. Includes ideas for integrating green stormwater treatment into planning and building design, as well as green design solutions like green roofs and bioretention gardens.
National Green Values™ Calculator Methodology	Center for Neighborhood Technology. 2009. <i>National Green Values™ Calculator Methodology</i> . Center for Neighborhood Technology, Chicago, Illinois.	The calculator is used to compare green infrastructure performance, costs, and benefits to conventional stormwater practices in an effort to encourage communities to adopt green infrastructure as the preferred method for stormwater management. The calculator takes the user's location into consideration by using National Oceanic and Atmospheric Administration (NOAA) data.
Green Values Stormwater Calculator Methodology	Center for Neighborhood Technology. 2009. <i>Green Values Stormwater Calculator Methodology</i> . Center for Neighborhood Technology, Chicago, Illinois.	The calculator is designed to arrive at a first approximation of the hydrologic and financial conditions for a user-defined site. Calculator does not use NOAA data like the National Green Values Calculator does.
Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act	U.S. Environmental Protection Agency. 2009. <i>Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act</i> . EPA 841-B-09-001. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Section 438 of the Energy Independence and Security Act of 2007 requires federal agencies to reduce stormwater runoff from federal development projects to protect water resources. This guidance document includes information on how to meet section 438 requirements by using green infrastructure and LID practices.

Title	Bibliographic Information	Description
Monitoring to Demonstrate Environmental Results: Guidance to Develop Local Stormwater Monitoring Studies Using Six Example Study Designs	N.L. Law, L. Fraley-McNeal, K. Cappiella, R. Pitt. 2008. <i>Monitoring to Demonstrate Environmental Results: Guidance to Develop Local Stormwater Monitoring Studies Using Six Example Study Designs</i> . Center for Watershed Protection, Ellicott City, Maryland.	Provides guidance to municipal separate storm sewer (MS4) communities on developing monitoring studies whose results can help improve their local stormwater programs by getting more pollutant reduction out of the total community stormwater investment. The manual presents the broad concepts and methods behind setting up special monitoring studies.
Impacts of Impervious Cover on Aquatic Systems	Center for Watershed Protection. 2003. <i>Impacts of Impervious Cover on Aquatic Systems</i> . Center for Watershed Protection, Ellicott City, Maryland.	Includes specific impacts on aquatic systems as a result of increased impervious surfaces, classified into changes in hydrologic, physical, water quality, or biological indicators.
After the Storm: Analyzing Stormwater Options after Disaster Strikes	A.M. Bricmont, Malcolm Pirnie Inc. 2008. After the Storm: Analyzing Stormwater Options after Disaster Strikes. Prepared by Water Environment Federation for The Utility Management Conference, Tampa, Florida.	Focuses on the City of El Paso after it experienced severe flooding throughout the city. The storm resulted in significant damage to public and private property. The city invested in capital projects to repair and improve streets and drainage facilities, including the completion of a Stormwater Feasibility Assessment Study to assess alternatives to the status quo for managing and funding stormwater activities.
Rain Gardens in Connecticut: A Design Guide for Homeowners	M. Dietz. 2009. Rain Gardens in Connecticut: A Design Guide for Homeowners. University of Connecticut Cooperative Extension System (CES), Storrs, Connecticut.	Discusses the use of rain gardens in residential settings as a way of reducing the number of pollutants leaving yards, helping to sustain adequate stream flow, enhancing natural beauty, protecting communities from flooding, and reducing the need for municipal stormwater treatment structures.

Title	Bibliographic Information	Description
Water Quality Scorecard: Incorporating Green Infrastructure Practices at the Municipal, Neighborhood, and Site Scales	U.S. Environmental Protection Agency. 2009. Water Quality Scorecard: Incorporating Green Infrastructure Practices at the Municipal, Neighborhood, and Site Scales. EPA 231-B-09-001. U.S. Environmental Protection Agency, Office of Research and Development, Washington, D.C.	Provides guidance on opportunities for local governments to remove barriers, and revise and create codes, ordinances, and incentives for better water quality protection. Focuses on helping communities protect water quality by identifying ways to reduce the amount of stormwater flows in a community and educating stakeholders.
Conservation Practice	es and Technology	
Water Conservation Measurement Metrics: Guidance Report	B. Dziegielewski and J.C. Kiefer. 2010. Water Conservation Measurement Metrics: Guidance Report. The American Water Works Association, Water Conservation Division Subcommittee, Denver, Colorado.	Identifies and characterizes a set of water use and conservation metrics for public water supply utilities. These metrics can be used as measurement tools to evaluate the effects of water efficiency programs over time in a single utility. Some metrics can also be used to compare water use and conservation effects across different utilities.
Guidelines for Water Reuse	U.S. Environmental Protection Agency and U.S. Agency for International Development. 2004. <i>Guidelines for Water Reuse</i> . EPA 625-R-04-108. Prepared by Camp Dresser & McKee, Inc. for the U.S. Environmental Protection Agency, Office of Wastewater Management and Office of Research and Development, and U.S. Agency for International Development, Washington, D.C.	Discusses the reuse of water in a variety of situations, including urban reuse, industrial reuse, agriculture reuse, environmental and recreational reuse, groundwater recharge, and augmentation of potable supplies. Also includes case studies, regulations, legal issues, funding, public involvement, and water reuse internationally.
Cases in Water Conservation: How Efficiency Programs Help Water Utilities Save Water and Avoid Costs	U.S. Environmental Protection Agency. 2002. Cases in Water Conservation: How Efficiency Programs Help Water Utilities Save Water and Avoid Costs. EPA 832-B-02-003. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Case studies regarding implementation of water conservation practices ranging in size from small to very large, including efficiency programs that incorporate a wide range of techniques for achieving various water management goals. Many of the studies include various combinations of green practices.
Conservation Subdivisions: A Better Way to Protect Water Quality, Retain Wildlife, and Preserve Rural Character	Nonpoint Education for Municipal Officials. 1999. Conservation Subdivisions: A Better Way to Protect Water Quality, Retain Wildlife, and Preserve Rural Character. University of Connecticut Cooperative Extension System (CES), Storrs, Connecticut.	Fact sheet discussing the "conservation subdivision" design concept, which maximizes open space protection without reducing the number of homes or structures built. Discusses the use of conservation easements to protect land and water resources.

Title	Bibliographic Information	Description
Wetlands		
Direct and Indirect Impacts of Urbanization on Wetland Quality	T. Wright, J. Tomlinson, T. Schueler, K. Cappiella, A.Kitchell, and D. Hirschman. 2006. <i>Direct and Indirect Impacts of Urbanization on Wetland Quality</i> . Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds, Washington, D.C.	Discusses the results of studies on the direct and indirect impacts of urbanization on wetlands and the key role wetlands play in watershed quality. The findings discussed include (1) wetlands provide important ecological services, (2) the goal of no net loss in wetland quality has not been reached, (3) indirect impacts on wetlands are caused by land alteration in the contributing drainage area, and (4) impacted wetlands experience a sharp decline in the diversity of the native plant and animal community and an increase in invasive plant species. The article also recommends local watershed planning approaches to wetland management.
Using Local Watershed Plans to Protect Wetlands	K. Cappiella, A. Kitchell, and T. Schueler. 2006. <i>Using Local Watershed Plans to Protect Wetlands</i> . Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds, Washington, D.C.	Describes a proposed framework for integrating wetland management in the context of local, state, and tribal watershed planning efforts, rather than regulating wetlands on an individual site-by-site basis.
Adapting Watershed Tools to Protect Wetlands	K. Cappiella, T. Schueler, J. Tasillo, and T. Wright. 2005. <i>Adapting Watershed Tools to Protect Wetlands</i> . Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds, Washington, D.C.	Includes techniques for protecting wetlands through local programs and ordinances related to development and other land use activities. The techniques can be implemented as part of local watershed plans to provide comprehensive watershed protection and can be adapted to protect specific wetlands and watersheds.
A Local Ordinance to Protect Wetland Functions	B. Strommen, K. Cappiella, D. Hirschman, and J. Tasillo. 2007. <i>A Local Ordinance to Protect Wetland Functions</i> . Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds, Washington, D.C.	Discusses how local development regulations can fill the gap in wetland protection that results from receiving the bulk of stormwater runoff from development sites. Includes a model ordinance that follows concepts and principles for protecting wetlands.

Title	Bibliographic Information	Description
The Next Generation of Stormwater Wetlands	K. Cappiella, L. Fraley-McNeal, M. Novotney, and T. Schueler. 2008. <i>The Next Generation of Stormwater Wetlands</i> . Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds, Washington, D.C.	Presents two new stormwater wetland designs: an emergent wetland/pond system and a wooded wetland. The goal of these new designs is to enhance pollutant removal, increase habitat value, and minimize problems with invasive species and mosquitoes, while minimizing construction costs and maintenance burden.
The Importance of Protecting Vulnerable Streams and Wetlands at the Local Level	K. Cappiella and L. Fraley-McNeal. 2007. <i>The Importance of Protecting Vulnerable Streams and Wetlands at the Local Level</i> . Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds, Washington, D.C.	Makes the case for expanded state and local protection of vulnerable streams and wetlands because of their role as ecological linkages to downstream receiving waters; their capacity to store floodwaters and recharge groundwater supplies; their ability to remove excess nutrients and sediment; and their exceptional biodiversity and supporting habitat for many threatened or endangered species. The article provides recommendations for local governments to use special protection ordinance or zoning to regulate activities in or around vulnerable streams and wetlands, and it encourages voluntary stream and wetland protection.
Chesapeake Bay Riparian Handbook: A Guide for Establishing and Maintaining Riparian Forest Buffers Riparian Forest	R.S. Palone and A.H. Todd (editors.) 1997. Chesapeake Bay Riparian Handbook: A Guide for Establishing and Maintaining Riparian Forest Buffers. NA-TP-02-97. U.S. Department of Agriculture, Forest Service, Radnor, Pennsylvania. Alliance for the Chesapeake Bay. 2004. Riparian Forest Buffers: Linking Land	Discusses the functions and values of riparian forest buffers and the design of buffer systems for nonpoint source pollution reduction related to the protection of the Chesapeake Bay. Most of the practices discussed are green practices. Discusses the functions and benefits of riparian forest
Buffers: Linking Land and Water	and Water. Alliance for the Chesapeake Bay, Annapolis, Maryland.	buffers and the current and future plans for riparian forest buffers in the Chesapeake Bay.

Title	Bibliographic Information	Description
Point Sources		
Wastewater Treatme	nt Technology	
Opportunities for and Benefits of Combined Heat and Power at Wastewater Treatment Facilities	U.S. Environmental Protection Agency. 2007. Opportunities for and Benefits of Combined Heat and Power at Wastewater Treatment Facilities. Prepared by Eastern Research Group, Inc. (ERG) and Energy and Environmental Analysis, Inc. for the U.S. Environmental Protection Agency, Combined Heat and Power Partnership, Washington, D.C.	Discusses the use of Combined Heat and Power (CHP) at wastewater treatment facilities with anaerobic digesters. The biogas flow from the digester can be used as "free" fuel to generate electricity and power in a CHP system. The thermal energy produced by the CHP system is then typically used to meet digester heat loads and for space heating. At wastewater treatment facilities (WWTFs), a CHP system produces power at a cost below that of retail electricity, displaces purchased fuels for thermal needs, qualifies as a renewable fuel for green power programs, enhances power reliability for the plant, and offers an opportunity to reduce greenhouse gas and other air emissions.
Combined Heat and Power: Energy Savings and Energy Reliability for Wastewater Treatment Facilities (Draft)	U.S. Environmental Protection Agency. 2008. Combined Heat and Power: Energy Savings and Energy Reliability for Wastewater Treatment Facilities. Draft. U.S. Environmental Protection Agency, Combined Heat and Power Partnership, Washington, D.C.	Flier supporting the Opportunities for and Benefits of Combined Heat and Power at Wastewater Treatment Facilities document.
Wastewater Technology Fact Sheet, Wetlands: Subsurface Flow	U.S. Environmental Protection Agency. 2000. Wastewater Technology Fact Sheet, Wetlands: Subsurface Flow. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Describes the use of subsurface flow wetlands as a treatment technology for WWTFs. Includes advantages, disadvantages, design criteria, performance, operation and maintenance, and costs.
Wastewater Technology Fact Sheet, Free Water Surface Wetlands	U.S. Environmental Protection Agency. 2000. <i>Wastewater Technology Fact Sheet, Free Water Surface Wetlands</i> . U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Describes the use of free surface wetlands as a treatment technology for WWTFs, usually in the form of advanced treatment. Includes advantages, disadvantages, design criteria, performance, operation and maintenance, and costs.

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Title	Bibliographic Information	Description
Wastewater Management Fact Sheet: Energy Conservation	U.S. Environmental Protection Agency. 2006. Wastewater Management Fact Sheet: Energy Conservation. EPA 832-F-06-024. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Summarizes energy conservation techniques at WWTFs, including tracking energy usage and costs; upgrading equipment, systems, and controls; and performing energy audits, and the costs associated with implementing an energy conservation plan.
Auxiliary and Supplemental Power Fact Sheet: Fuel Cells Auxiliary and Supplemental Power Fact Sheet: Microturbines	U.S. Environmental Protection Agency. 2006. Auxiliary and Supplemental Power Fact Sheet: Fuel Cells. EPA 832-F-05-012. U.S. Environmental Protection Agency, Office of Water, Washington, D.C. U.S. Environmental Protection Agency. 2005. Auxiliary and Supplemental Power Fact Sheet: Microturbines. EPA 832-F-05-014. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Describes the use of fuel cells as auxiliary and supplemental power sources at WWTFs. Includes advantages, disadvantages, costs, and a case study. Describes the use of microturbines as auxiliary and supplemental power sources at WWTFs. Includes advantages, disadvantages, costs, and a case study.
Auxiliary and Supplemental Power Fact Sheet: Solar Power	U.S. Environmental Protection Agency. 2007. <i>Auxiliary and Supplemental Power Fact Sheet: Solar Power</i> . EPA 832-F-05-011. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Describes the use of solar power as auxiliary and supplemental power sources at WWTFs. Includes advantages, disadvantages, costs, and a case study.
Auxiliary and Supplemental Power Fact Sheet: Viable Sources	U.S. Environmental Protection Agency. 2006. <i>Auxiliary and Supplemental Power Fact Sheet: Viable Sources</i> . EPA 832-F-05-009. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Summary of viable sources for auxiliary and supplemental power sources at WWTFs. Includes discussion of internal combustion engine-driven generators, microturbines, fuel cells, solar cells, and wind turbines.
Auxiliary and Supplemental Power Fact Sheet: Wind Turbines	U.S. Environmental Protection Agency. 2007. <i>Auxiliary and Supplemental Power Fact Sheet: Wind Turbines</i> . EPA 832-F-05-013. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Describes the use of wind turbines as auxiliary and supplemental power sources at WWTFs. Includes advantages, disadvantages, costs, and case studies.
Fact Sheet: The Living Machine® Wastewater Reuse Technology	Worrell Water Technologies. N.d. Fact Sheet: The Living Machine® Wastewater Reuse Technology. Worrell Water Technologies. http://www.livingmachines.com/resources .	The Living Machine® is an ecological wastewater treatment system that treats wastewater for reuse, thereby allowing communities or institutions to locally manage wastewater and create high-quality reuse water. The Living Machine is a "turbo-charged" wetland system that speeds up natural processes.

Title	Bibliographic Information	Description
Tidal Wetland Living Machine System®: System Description and Scientific Basis	Worrell Water Technologies. 2007. <i>Tidal Wetland Living Machine System®: System Description and Scientific Basis</i> . Worrell Water Technologies. http://www.livingmachines.com/resources .	The Tidal Wetland Living Machine system is composed of multiple flood and drain (tidal) wetland cells that flood and drain in a serial fashion. A recycle loop passes water through the treatment system several times. The system achieves advanced removal of biochemical oxygen demand (BOD), total suspended solids (TSS), and total nitrogen.
The Power of Digester Gas	M. McDannel and E. Wheless. 2008. The Power of Digester Gas. Water Environment & Technology. 2008 (June): 37 – 41.	Discusses using wastewater and solid waste management by-products to generate electricity. The benefits of these by-products are low-cost sources that can provide enough local power to displace imported power, thereby reducing the expense and environmental consequences of burning fossil fuels.
Water Headlines for the Week of July 26, 2010	U.S. Environmental Protection Agency. 2010. Water Headlines for the Week of July 26, 2010. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Headlines include an article on an EPA-awarded \$671,000 grant to the Town of Grafton, Massachusetts, to build and operate an innovative stormwater and wastewater treatment park along the Blackstone River and historic industrial canal.
Options for Improving Climate Modeling to Assist Water Utility Planning for Climate Change	J. Barsugli et.al. 2009. Options for Improving Climate Modeling to Assist Water Utility Planning for Climate Change. Water Utility Climate Alliance, San Francisco, California.	Examines how investments in the science of climate change, and in particular climate modeling, can best be directed to help improve the quality of science so that it can be more useful to water utilities and other possible users in adapting to climate change. The main focus of this report is the identification of investments in the science of climate change that can best improve the science to support adaptation.

Title	Bibliographic Information	Description
A Screening Assessment of the Potential Impacts of Climate Change on the Costs of Implementing Water Quality-Based Effluent Limits at Publicly-Owned Treatment Works (POTWs) in the Great Lakes Region	U.S. Environmental Protection Agency. 2006. A Screening Assessment of the Potential Impacts of Climate Change on the Costs of Implementing Water Quality-Based Effluent Limits at Publicly-Owned Treatment Works (POTWs) in the Great Lakes Region. EPA 600-R-07-034A. U.S. Environmental Protection Agency, Office of Research and Development, Washington, D.C.	Describes the potential scope and magnitude of climate change impacts on the cost of meeting water quality-based effluent limits at POTWs discharging to rivers and streams in the Great Lakes Region. The report is a screening-level analysis focusing on the costs of meeting water quality-based effluent limits for a single pollutant, biochemical oxygen demand, at all POTWs in the region discharging to currently impaired stream reaches.
VSAT—Risk Assessment Tool for Water Sector Utilities	U.S. Environmental Protection Agency. 2010. VSAT—Risk Assessment Tool for Water Sector Utilities. Fact Sheet. EPA 817-F-10-015. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	VSAT is a risk assessment software tool for water, wastewater, and combined utilities of all sizes. The tool assists drinking water and wastewater owners and operators in performing security threats and natural hazards risk assessments, as well as updating utility Emergency Response Plans.
Water Health and Economic Analysis Tool	U.S. Environmental Protection Agency. 2010. <i>Water Health and Economic Analysis Tool.</i> Fact Sheet. EPA 817-F-10-013. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	The Water Health and Economic Analysis Tool (WHEAT) is designed to assist drinking water utility owners and operators in quantifying public health impacts, utility financial costs, and regional economic impacts of an adverse event, based on a variety of asset-threat combinations that pose a risk to the water sector.
The Ripple Effect: Water Risk in the Municipal Bond Market	S. Leurig. 2010. The Ripple Effect: Water Risk in the Municipal Bond Market. Ceres, Boston, Massachusetts.	Demonstrates why investors should treat water availability as a growing concern for both public water and electric power utilities, and how associated risks are not currently reflected in public utility bond ratings. Because these ratings assess utilities' ability to repay debt, their failure to include growing water risks neglects a key factor essential to the financial viability of utilities—and to the institutional and retail investors who own their bonds.

Title	Bibliographic Information	Description
Greenhouse Gas Emissions and Biological Nutrient Removal	Water Environment Research Foundation. 2010. <i>Greenhouse Gas Emissions and Biological Nutrient Removal</i> . Water Environment Research Foundation, Alexandria, Virginia.	The report provides information on potential greenhouse gas emissions from wastewater treatment processes. The report also discusses how wastewater treatment facilities that proactively measure their greenhouse gas emissions can demonstrate that their emission levels are lower than the threshold, create energy and capture waste heat from digester gases, produce other resources from wastewater (water, phosphorus, etc.), while simultaneously reducing their carbon footprints and even participating in a future carbon trading market.
Evaluation of Energy Conservation Measures for Wastewater Treatment Facilities	U.S. Environmental Protection Agency. 2010. Evaluation of Energy Conservation Measures for Wastewater Treatment Facilities. EPA 832-R-10- 005. U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C.	The report focuses on energy efficient equipment replacement, operational modifications, and process control enhancements at POTWs that would lead to improved energy efficiency and cost savings with a reasonable payback period of 10 years or less. The goal of this report is to encourage the use and implementation of energy conservation measures at POTWs by providing cost/benefit information for these types of projects.
Energy		
Energy Star® Performance Ratings: Technical Methodology for Wastewater Treatment Plant	U.S. Environmental Protection Agency and U.S. Department of Energy. 2007. Energy Star® Performance Ratings: Technical Methodology for Wastewater Treatment Plant. U.S. Environmental Protection Agency and U.S. Department of Energy, Energy Star®, Washington, D.C.	Details EPA's analytical result and rating methodology for wastewater treatment plants and lists the energy efficiency ratio cutoff point for each rating.

Title	Bibliographic Information	Description
Ensuring a Sustainable Future: An Energy Management Guidebook for Wastewater and Water Utilities	U.S. Environmental Protection Agency and Global Environment & Technology Foundation. 2008. Ensuring a Sustainable Future: An Energy Management Guidebook for Wastewater and Water Utilities. U.S. Environmental Protection Agency, Office of Wastewater Management, Washington, D.C.	Guidebook geared toward utility managers, which focuses on the cost and benefits of conserving energy. Includes information on prioritizing energy conservation targets, implementing specific practices to meet conservation targets, monitoring and measuring energy performance improvements and cost savings, and reviewing progress and making adjustments to energy conservation efforts.
Reducing Energy Usage In Water And Wastewater Facilities	G. Van Hemert, G. 2009. Reducing Energy Usage in Water and Wastewater Facilities. <i>Water Online: The Magazine</i> , Clean Water Edition. 2009 (May): 8–11.	Discusses opportunities and ideas for energy conservation at WWTFs, including energy action plans, power monitoring, data monitoring, process and procedural changes, pumping and blowers, ultraviolet and ozone, pump stations, lighting, and power correction factors.
Save on Energy, Save on Expenditures: Smart Energy Management Yields Significant Water and Wastewater Facility Savings	L.E. Ferrell. 2010. Save on Energy, Save on Expenditures: Smart Energy Management Yields Significant Water and Wastewater Facility Savings. Water and Wastes Digest 50(3): 36–38.	Discusses opportunities for energy savings at WWTFs.
Energy Star: Water and Water Utilities	K. Hatcher. 2009. Energy Star: Water and Water Utilities. U.S. Environmental Protection Agency Webcast presentation, March 5, 2009. Washington, D.C.	Webcast presentation for EPA on Energy Star facilities and products, particularly as they relate to water and wastewater uses.
Policy EPA Policy		
Use of Green Infrastructure in NPDES Permits and Enforcement	L. Boornazian and M. Pollins. 2007. Use of Green Infrastructure in NPDES Permits and Enforcement. Memorandum from Linda Boornazian, Director, Water Permits Division, and Mark Pollins, Director, Water Enforcement Division, to Water Division Directors, Regions 1–10.	Memo specifying the role of green infrastructure in permitting and enforcement. Permittees should be encouraged to implement green infrastructure techniques. Enforcement activities should consider the use of green infrastructure as a water pollution control technology.

Title	Bibliographic Information	Description
Clarification of which stormwater infiltration practices/technologies have the potential to be regulated as "Class V" wells by the Underground Injection Control Program	L. Boornazian and S. Heare. 2008. Clarification on which stormwater infiltration practices/technologies have the potential to be regulated as "Class V" wells by the Underground Injection Control Program. Memorandum from Linda Boornazian, Director, Water Permits Division, and Steve Heare, Director, Drinking Water Protection Division, to Water Division Directors, Regions 1–10.	Memo regarding which stormwater infiltration practices may qualify as Class V wells. Most of the green infiltration practices involving vegetation or wetland development are not considered Class V wells.
Using Green Infrastructure to Protect Water Quality in Stormwater, CSO, Nonpoint Source and other Water Programs	B.H. Grumbles. 2007. Using Green Infrastructure to Protect Water Quality in Stormwater, CSO, Nonpoint Source and other Water Programs. Memorandum from Benjamin H. Grumbles, Assistant Administrator, to EPA Regional Administrators.	Highlights and encourages the use of green infrastructure in water programs. Lists benefits of green infrastructure practices, especially related to stormwater.
Incorporating Green Infrastructure Concepts into Total Maximum Daily Loads (TMDLs)	U.S. Environmental Protection Agency. 2008. <i>Incorporating Green Infrastructure Concepts into Total Maximum Daily Loads (TMDLs)</i> . No publication number. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	Discusses the role that green infrastructure and LID can play in meeting TMDL requirements. Includes case studies with different pollutants of concern and their sources and the corresponding proposed green infrastructure and LID practices to reduce the pollutant loads.
Green Infrastructure for Clean Water Act of 2009	Green Infrastructure for Clean Water Act of 2009. House of Representatives Bill. H.R. 4202 (2009). http://www.thomas.gov >.	Introduced December 9, 2009 by Ms. Edwards from Maryland. Requires the Administrator of the Environmental Protection Agency to make competitive grants to eligible higher education institutions and research institutions to establish and maintain between three and five centers of excellence for green infrastructure. Defines "green infrastructure" as a stormwater management technique that preserves, restores, enhances, or mimics natural hydrology. The bill was not passed. S. 3561 is a related bill.

Title	Bibliographic Information	Description
H.R. 4202: The Green Infrastructure for Clean Water Act of 2009	American Rivers. 2009. H.R. 4202: The Green Infrastructure for Clean Water Act of 2009. American Rivers, Washington, D.C.	H.R. 4202 would provide support to green infrastructure strategies by establishing a green infrastructure program within EPA's Office of Water; investing \$1.2 billion in planning, development, and implementation grants; and establishing up to five Centers of Excellence for Green Infrastructure.
EPA's Clean Water and Drinking Water Infrastructure Sustainability Policy	U.S. Environmental Protection Agency. 2010. <i>EPA's Clean Water and Drinking Water Infrastructure Sustainability Policy</i> . No publication number. U.S. Environmental Protection Agency, Office of Water, Washington, D.C.	This policy is a collaborative effort between EPA and its federal, state, and local partners and emphasizes the need to build on existing efforts to promote sustainable water infrastructure. The policy encourages communities to develop sustainable systems that employ effective utility management practices to build and maintain the level of technical, financial, and managerial capacity necessary to ensure long-term clean water and drinking water sustainability.
Programs		
Bluebelt Beginnings— Green Preserves Blue on Staten Island	J. Garin, D.F. Grumb, Jr., A.D. Cavallaro, N. Barbaro, R. Smith, S. Mehrota, and B.Henn. 2009. Bluebelt Beginnings—Green Preserves Blue on Staten Island. New York Water Environment Association, Inc. <i>Clear Waters</i> 39(4): 10–20.	The Bluebelt Program in Staten Island, New York, uses green practices, BMPs, and natural wetlands to address stormwater and flood problems. Discusses history, BMPs, permitting, design, maintenance, and the future of the program.
Staten Island History and Bluebelt Land Acquisitions	D.F. Grumb, Jr. 2009. Staten Island History and Bluebelt Land Acquisitions. New York Water Environment Association, Inc. <i>Clear Waters</i> 39(4): 22–25.	The Bluebelt Program in Staten Island, New York, uses green practices, BMPs, and natural wetlands to address stormwater and flood problems. Discusses in particular the history and the land acquisition required to implement the program.
Designing for Wildlife in the Bluebelt	R.J. Brauman, D.F. Grumb, Jr., and C. Duerkes. 2009. Designing for Wildlife in the Bluebelt. New York Water Environment Association, Inc. <i>Clear Waters</i> 39(4): 41–43.	The Bluebelt Program in Staten Island, New York, uses green practices, BMPs, and natural wetlands to address stormwater and flood problems. Discusses the ancillary benefit of habitat creation and positive impact on wildlife.

Title	Bibliographic Information	Description
Wastewater Reclamation for Use in Snow-making within an Alpine Resort in Australia – Resource Rather Than Waste	Z. Tonkovic and S. Jeffcoat. 2002. Wastewater Reclamation for Use in Snow-making within an Alpine Resort in Australia—Resource Rather Than Waste. Water Science and Technology 46(6–7): 297–302.	Scientific article discussing the use of treated wastewater for snow-making.
Recycled Water Used for Snow Making at Mt. Buller Mt. Buller Water Recycle and Conservation Project: Providing a Sustainable Mountain	Mt. Buller & Mt. Stirling Resort Management. 2008. Recycled Water Used for Snow Making at Mt. Buller. Fact sheet. http://www.mtbuller.com.au/summer/Environment2/Water-Recycling-Snowmaking . Mt. Buller & Mt. Stirling Resort Management. 2008. Mt. Buller Water Recycle and Conservation Project: Providing a Sustainable Mountain. http://www.mtbuller.com.au/uploads/file/Water_Reuse_Map.pdf .	Fact sheet highlighting the use of wastewater that is treated to a high standard for making snow during the winter months at Mt. Buller in Australia. Map of the treatment system that treats wastewater to a high standard for making snow during the winter months at Mt. Buller in Australia.
Vail Releases Green Details of "Ever Vail" Development	Vail Releases Green Details of "Ever Vail" Development. 2007, September 27. Environmental Leader: Energy and Environmental News for Business. http://www.environmentalleader.com/2007/09/25 /vail-releases-green-details-of-ever-vail-development>.	News article on the plans for a new green community in Vail, Colorado. Reclaimed water from snowmelt will be used as gray water in the toilets, rather than using potable water. A closed-loop gray water system will also be used for washing all mountain operations vehicles, such as snowcats and snowmobiles.
Colorado Climate Action Plan: A Strategy to Address Global Warming	B. Ritter, Jr. 2007. Colorado Climate Action Plan: A Strategy to Address Global Warming. Denver, CO.	Summarizes Colorado's plan to address climate change by reducing greenhouse gas emissions; recognizing agriculture as part of a solution; using new and greener forms of transportation; providing greener electricity; increasing research for coal, natural gas, and renewable energy; increased recycling; reporting emissions; being part of regional carbon trading; and increasing education.
The Smart Watershed Benchmarking Tool	P. Rowe and T. Schueler. 2006. <i>The Smart Watershed Benchmarking Tool.</i> Prepared by Center for Watershed Protection for U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds, Washington, D.C.	Overview of Smart Watershed programs, including benefits and applications of the benchmarking tool for local communities. In addition, the report presents a series of detailed profile sheets that describe 14 Smart Watershed programs and presents the Smart Watershed benchmarking tool.

Title	Bibliographic Information	Description
Confronting Climate Change: An Early Analysis of Water and Wastewater Adaptation Costs	National Association of Clean Water Agencies and Association of Metropolitan Water Agencies. 2009. <i>Confronting Climate Change: An Early Analysis of Water and Wastewater Adaptation Costs</i> . CH2M Hill, Inc., Englewood, Colorado.	Assessment that characterizes the impacts of climate change on drinking water and wastewater services in the United States through 2050; addresses the challenges of ensuring reliable water and wastewater services; and provides preliminary cost estimates to address the challenges that utilities face as a result of climate change.
The Source Water, Climate and Carbon Connection	G.T. Mehan III, C.H. Sham, C. Hernick, and J. Obbagy. 2009. The Source Water, Climate and Carbon Connection. <i>Water & Wastes Digest</i> . 2009 (November): 30–31.	The imperative to reduce carbon emissions is leading many to create incentives for source water protection that would improve water quality, achieve human health goals, and reduce or mitigate climate change effects. Describes the incentives that can save money and generate multiple environmental benefits, such as new habitat, restored natural flows, landscape protection, and improved aesthetics.
Creating an Army of Green Plumbers	D. Green. 2010. Creating an Army of Green Plumbers. <i>Journal of the American Water Works Association</i> . 2010 (February): 67–69.	Article detailing the Green Plumbers USA program. The program educates plumbers of all affiliations in conservation and technologies related to sustainable water use that promotes protecting the environment and saving money.
Protecting and Improving Estuaries with Smart Growth Tools: Lower Columbia River Estuary Partnership	U.S. Environmental Protection Agency. 2008. Protecting and Improving Estuaries with Smart Growth Tools: Lower Columbia River Estuary Partnership. U.S. Environmental Protection Agency, Office of Wetlands, Oceans and Watersheds, Washington, D.C.	Discusses the review of development plans for Oregon City, Oregon, and Longview, Washington, by the Lower Columbia River Estuary Partnership. The program assisted the communities in using smart growth practices to reduce stormwater impacts on the Columbia River.
Integrated Land Planning: A Welcome Alternative	M.J. Baumgarten. 2010. Integrated Land Planning: A Welcome Alternative. Water and Wastes Digest 50(3): 28–29.	Article discussing the alternatives to building or expanding expensive stormwater and gray water treatment through the use of green engineering techniques.

Title	Bibliographic Information	Description
American Recovery and Reinvestment Act of 2009: State and Local Guide to U.S. EPA Climate and Energy Program Resources	U.S. Environmental Protection Agency. 2009. American Recovery and Reinvestment Act of 2009: State and Local Guide to U.S. EPA Climate and Energy Program Resources. U.S. Environmental Protection Agency, Washington, D.C.	A guide for state and local governments to help determine how clean energy initiatives can be expanded or developed under the American Recovery and Reinvestment Act of 2009.
Building Green Communities: Online Resources for Local Governments	U.S. Environmental Protection Agency. 2008. <i>Building Green Communities:</i> Online Resources for Local Governments. U.S. Environmental Protection Agency, Office of Congressional and Intergovernmental Relations, Washington, D.C.	Compendium of information, resources, and tools from EPA, other federal agencies, and non-governmental organizations regarding green communities. Includes information on climate change, clean energy, green buildings, green products, sustainable water infrastructure, water conservation, and waste management.

Title	Bibliographic Information	Description
Report on Voluntary Environmental Improvement Bonds: An Innovative, Local, Environmental Finance Concept for Mitigation of Climate Change Risk; Air Pollution Reduction; and the Reduction of Non-point Source Pollution	U.S. Environmental Protection Agency, Environmental Financial Advisory Board. 2009. Two Reports: Report on Voluntary Environmental Improvement Bonds: An Innovative, Local, Environmental Finance Concept for Mitigation of Climate Change Risk; Air Pollution Reduction; and the Reduction of Nonpoint Source Pollution and Report on the Financial, Underwriting, Risk Mitigation and Consumer Protection Considerations for the Adoption of Voluntary Environmental Improvement Bond (VEIB) Programs. U.S. Environmental Protection Agency, Environmental Financial Advisory Board, Washington, DC.	Letter to Lisa Jackson, EPA Administrator, with two reports detailing the VEIB Program. The VEIB Program produces long-term, low-cost incentives for installing improvements to reduce greenhouse gas emissions, improve air quality, and reduce nonpoint source water pollution.
Report on the Financial, Underwriting, Risk Mitigation and Consumer Protection Considerations for the Adoption of Voluntary Environmental Improvement Bond (VEIB) Programs		
Principles of Water Utility Adaptation to Climate Change	Association of Metropolitan Water Agencies, American Water Works Association, International Water Association, Water Research Foundation and Water Utility Climate Alliance. 2010. <i>Principles of Water Utility Adaptation to Climate Change</i> . Climate Change Impacts on Water: An International Adaptation Forum, Washington, D.C.	Overview of fundamental considerations that must be addressed for water utilities to effectively plan to adapt to climate change and to raise awareness among government and non-government policy makers.
Climate Change Adaptation Actions for Local Government	SMEC Australia. 2010. Climate Change Adaptation Actions for Local Government. Department of Climate Change and Energy Efficiency, Canberra Australian Capital Territory, Australia.	Identifies climate change adaptation actions that (1) are applicable to climatic conditions and climate impact risks in Australia as currently predicted (using 2001 scenarios), and (2) can be implemented by Australian local governments.

Title	Bibliographic Information	Description
Climate Change and Water Resources Management: A Federal Perspective	L.D. Brekke. 2009. Climate Change and Water Resources Management: A Federal Perspective. Circular 1331. U.S Department of the Interior, U.S. Geological Survey, Reston, Virginia.	Explores strategies to improve water management by tracking, anticipating, and responding to climate change. Identifies available climate information that could be used for decision-making in long-range planning, some approaches for this decision-making, adaptation options to pursue, and opportunities for advancing planning capabilities. The integration of current knowledge in climate science, hydrology, and long-term planning results in informed decisions for water resource management.
Confronting Climate Change: An Early Analysis of Water and Wastewater Adaptation Costs	CH2M Hill, Inc. 2009. Confronting Climate Change: An Early Analysis of Water and Wastewater Adaptation Costs. Prepared by CH2M Hill for National Association of Clean Water Agencies and Association of the Metropolitan Water Agencies, Washington, D.C.	Provides details on the impacts climate change can have on wastewater and drinking water utilities and estimates the adaptation costs for these critical facilities to be between \$448 billion and \$944 billion through 2050. Impacts addressed include sea level rise and extreme flooding, water quality degradation and increased treatment requirements, water scarcity and the need to develop new drinking water supplies, and lower flows in drought conditions that can affect the operation of treatment facilities.
Energy Demands on Water Resources: Report to Congress on the Interdependency of Energy and Water	U.S. Department of Energy. 2006. Energy Demands on Water Resources: Report to Congress on the Interdependency of Energy and Water. U.S. Department of Energy, Washington, D.C.	Report to Congress on the interdependency of energy and water, focusing on threats to national energy production resulting from limited water supplies and utilizing where possible the multi-laboratory Energy-Water Nexus Committee. The report presents background information on the connections between energy and water, identifies concerns regarding the water demands of energy production, and discusses science and technologies to address water use and management in the context of energy production and use.

Title	Bibliographic Information	Description
Sustainable Water Systems: Step One— Redefining the Nation's Infrastructure Challenge	R. Bolger, D.Monsma, and R. Nelson. 2009. Sustainable Water Systems: Step One—Redefining the Nation's Infrastructure Challenge. A report of the Aspen Institute's Dialogue on Sustainable Water Infrastructure in the U.S. The Aspen Institute, Washington, D.C.	Study that examines the challenges that the drinking water and wastewater systems of America are now facing in maintaining and replacing their pipes, treatment plants, and other critical infrastructure. The report offers 10 policy recommendations, three key principles of sustainable water infrastructure, and 20 guiding elements of water management. It attempts to create a sustainable path forward for the nation.
Climate Adaptation Priorities for the Western States: Scoping Report	Western Governors' Association. 2010. <i>Climate Adaptation Priorities for the Western States: Scoping Report</i> . Western Governors' Association, Denver, Colorado.	Emphasizes the need for coordination between state and federal efforts to identify key science that is Western-specific and begins to share and implement smart practices.
Climate Change's Impact on the Design of Water, Wastewater, and Stormwater Infrastructure	J.A. O'Neill II. 2010. Climate Change's Impact on the Design of Water, Wastewater, and Stormwater Infrastructure. Presented at Hydrology Days Conference, March 22–24, 2010, Colorado State University, Fort Collins, Colorado.	Paper that looks at the impacts climate change will have on water, wastewater, and stormwater infrastructure and provides recommendations to assist engineers and owners who are working to address these impacts.
Climate Change Adaptation: What Federal Agencies Are Doing	The Pew Center on Global Climate Change. 2010. Climate Change Adaptation: What Federal Agencies Are Doing. The Pew Center on Global Climate Change, Arlington, Virginia.	Report reviews climate adaptation efforts in each major Department within the federal Government. The Report also provides an overview of each agency or bureau within each Department and their relevant climate adaptation activities, including: (1) initiatives and strategies, (2) programs and institutional mechanisms, and (3) tools and resources.
Getting Smart About Climate Change	International City/County Management Association. 2010. Getting Smart About Climate Change. International City/County Management Association, Washington, D.C.	Report on strategies for applying smart growth principles at local and regional levels to address climate change concerns. The report focuses on different strategies for smart growth implementation.

Title	Bibliographic Information	Description
Rising to the Urgent Challenge: Strategic Plan for Responding to Accelerating Climate Change	U.S. Fish and Wildlife Service. 2010. Rising to the Urgent Challenge: Strategic Plan for Responding to Accelerating Climate Change. U.S. Department of the Interior, U.S. Fish and Wildlife Service, Washington, D.C.	The report outlines plans to form 21 landscape conservation cooperatives to develop a better knowledge base about local impacts of climate change through partnerships with other government agencies and nongovernmental organizations. The partnerships will inform federal and state regulatory decisions and promote the best management of land and other resources as part a strategic plan for addressing climate change.

Useful Web Links

Federal Agencies

Catalog of Federal Domestic Assistance https://www.cfda.gov/

Fed Grants http://www.grants.gov/

U.S. Department of Agriculture (USDA)

2008 Farm Bill http://www.nrcs.usda.gov/programs/farmbill/2008/index.html

Conservation and Environmental Policy http://www.ers.usda.gov/briefing/ConservationPolicy/

Forest Inventory and Analysis National Program http://www.fia.fs.fed.us/

Maps, Imagery, Data, & Analysis http://www.nrcs.usda.gov/technical/maps.html

National Agricultural Library http://www.nalusda.gov/

Natural Resources Conservation Service (NRCS) http://www.nrcs.usda.gov/

NRCS Conservation Programs http://www.nrcs.usda.gov/programs/ and

http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=landing

National Water and Climate Center http://www.wcc.nrcs.usda.gov/

National Water Management Center http://wmc.ar.nrcs.usda.gov/

Rural Development http://www.rurdev.usda.gov/rbs/pub/newpub.htm

Soils http://soils.usda.gov/

U.S. Forest Service http://www.fs.fed.us/

Fire and Aviation http://www.fs.fed.us/fire/

Forest Inventory and Analysis http://fia.fs.fed.us/

Region 2

http://www.fs.usda.gov/wps/portal/fsinternet/!ut/p/c4/04 SB8K8xLLM9MSSzPy8xBz9CP0os3gjAwhwt DDw9 Al8zPwhQoY6BdkOyoCAPkATlA!/?ss=1102&navtype=BROWSEBYSUBJECT&cid=null&navid=091 00000000000&pnavid=null&position=BROWSEBYSUBJECT&ttype=main&pname=Region%202-

<u>%20Home</u>

Roadless Areas

http://www.fs.usda.gov/wps/portal/fsinternet/!ut/p/c4/04 SB8K8xLLM9MSSzPy8xBz9CP0os3gDfxMD T8MwRydLA1cj72BTFzMTAwjQL8h2VAQAJp-

nEg!!/?ss=119930&navtype=BROWSEBYSUBJECT&navid=091000000000000&pnavid=null&ttype=road main&cid=FSE 003853&position=RELATEDLINKS&pname=Roadless-Home

State and Private Forestry http://www.fs.fed.us/spf/

Water Quality Information Center

http://wqic.nal.usda.gov/nal display/index.php?info center=7&tax level=1&tax subject=596

U.S. Department of Energy http://www.energy.gov

Energy Star (EPA and U.S. Department of Energy) http://www.energystar.gov/

Smart Communities Network http://www.smartcommunities.ncat.org/welcome.shtml

The Environment http://www.energy.gov/environment/index.htm

U.S. Department of the Interior http://www.doi.gov/index.cfm

Bureau of Indian Affairs http://www.bia.gov/

Bureau of Land Management http://www.blm.gov/wo/st/en.html

Bureau of Reclamation http://www.usbr.gov/

National Park Service http://www.nps.gov/index.htm

Office of Surface Mining, Reclamation and Enforcement http://www.osm.gov/

U.S. Fish and Wildlife Service http://www.fws.gov/

Endangered Species http://www.fws.gov/endangered/

Fisheries and Habitat Conservation http://www.fws.gov/fisheries/

Grants http://www.fws.gov/grants/

Invasive Species http://www.fws.gov/invasives/

Landscape Conservation http://www.fws.gov/science/shc/index.html

Migratory Birds http://www.fws.gov/migratorybirds/dmbmdbhc.html

Partners for Fish and Wildlife Program http://www.fws.gov/partners/

Science http://www.fws.gov/science/

Wetlands http://www.fws.gov/wetlands/

Wildlife Refuges http://www.fws.gov/refuges/

Wildlife and Sportfish Recreation Program http://wsfrprograms.fws.gov/

U.S. Geological Survey http://www.usgs.gov/

Colorado Water Science Center http://co.water.usgs.gov/

Groundwater, Aquifers and Wells http://water.usgs.gov/ogw/

Floods, Droughts and Current Conditions

http://waterwatch.usgs.gov/new/?m=flood&r=us&w=flood,map/

Methods and Modeling http://water.usgs.gov/techniques.html

Quality of Water Resources http://water.usgs.gov/owq/

Streams, Lakes and Reservoirs http://water.usgs.gov/osw/

Water Data http://water.usgs.gov/data/

Water Use http://water.usgs.gov/watuse/

U.S. Environmental Protection Agency (EPA) http://www.epa.gov

Abandoned Mine Lands http://www.epa.gov/superfund/programs/aml/index.htm

Center for Environmental Finance http://www.epa.gov/efinpage/index.htm

Clean Energy http://www.epa.gov/cleanenergy/index.html

Climate Change http://www.epa.gov/climatechange/

Combined Heat and Power Partnership http://www.epa.gov/chp/index.html

Contaminated Sediments in Water http://water.epa.gov/polwaste/sediments/cs index.cfm

Effluent Limitation Guidelines http://water.epa.gov/scitech/wastetech/guide/index.cfm

Freshwater Ecosystems http://www.epa.gov/bioindicators/aquatic/freshwater.html

Grants and Funding http://water.epa.gov/grants funding/

Green Communities http://www.epa.gov/greenkit/index.htm

Green Infrastructure http://cfpub.epa.gov/npdes/home.cfm?program id=298

Groundwater http://water.epa.gov/type/groundwater/

Hydraulic Fracturing http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/index.cfm

Integrated Pest Management http://www.epa.gov/pesticides/factsheets/ipm.htm

Lakes http://water.epa.gov/type/lakes/

Laws and Regulations http://www.epa.gov/lawsregs/

Mining Waste http://www.epa.gov/osw/nonhaz/industrial/special/mining/index.htm

National Center for Environmental Assessment http://www.epa.gov/ncea/

National Pollutant Discharge Elimination System Permit Program http://cfpub.epa.gov/npdes/index.cfm

Rivers and Streams http://water.epa.gov/type/rsl/

Office of Water http://water.epa.gov/

Office of Wetlands, Oceans, and Watersheds http://water.epa.gov/aboutow/owow/

Polluted Runoff (Nonpoint Source Pollution) http://www.epa.gov/owow_keep/NPS/index.html

Smart Growth http://www.epa.gov/smartgrowth/

State and Local Climate and Energy Program http://www.epa.gov/statelocalclimate/index.html

Stormwater Program http://cfpub1.epa.gov/npdes/home.cfm?program_id=6

Superfund http://www.epa.gov/lawsregs/laws/cercla.html

Wastewater Management http://water.epa.gov/aboutow/owm/index.cfm

Water Quality Monitoring http://water.epa.gov/type/watersheds/monitoring/monitoring-index.cfm

Water Sense http://www.epa.gov/owm/water-efficiency/index.html

Watersheds http://water.epa.gov/type/watersheds/

Wetlands http://water.epa.gov/type/wetlands/

State Agencies

Colorado Department of Public Health and Environment (CDPHE) http://www.cdphe.state.co.us/

Division of Environmental Health and Sustainability http://www.cdphe.state.co.us/oeis/index.html

Water Quality Control Commission http://www.cdphe.state.co.us/op/wqcc/index.html

Water Quality Control Division http://www.cdphe.state.co.us/wq/index.html

Watershed Program http://www.cdphe.state.co.us/wq/Watershed.html

Colorado Department of Natural Resources (DNR) http://dnr.state.co.us/

Colorado Division of Reclamation Mining & Safety http://mining.state.co.us/

Colorado Geological Survey http://geosurvey.state.co.us/

Colorado Oil and Gas Conservation Commission http://cogcc.state.co.us/

Colorado State Land Board http://trustlands.state.co.us/Pages/SLB.aspx

Colorado State Forest Service http://www.csfs.colostate.edu/index.shtml/

Colorado Water Conservation Board http://cwcb.state.co.us/Pages/CWCBHome.aspx

Division of Water Resources http://water.state.co.us/Home/Pages/default.aspx

Division of Wildlife http://wildlife.state.co.us/

Other Organizations

American Rivers http://www.americanrivers.org/

American Water Resources Association http://www.awra.org/

American Water Works Association http://www.awwa.org/

The Aspen Institute http://www.aspeninstitute.org/

Association of Metropolitan Water Agencies http://www.amwa.net/

Center for Neighborhood Technology (CNT) http://www.cnt.org/

Center for Watershed Protection http://www.cwp.org/

Chesapeake Bay Program http://www.chesapeakebay.net/index.aspx

The Clean Water Network (CWN) http://www.cleanwaternetwork.org/

Colorado Watershed Assembly http://coloradowater.org/

Green Industries of Colorado (GreenCO) http://www.greenco.org/

International Stormwater BMP Database http://www.bmpdatabase.org/

National Association of Clean Water Agencies (NACWA) http://www.nacwa.org/

The Nature Conservancy http://www.nature.org/

Nonpoint Source Colorado http://npscolorado.com/

Northwest Colorado Council of Governments http://nwccog.org

Recharge Colorado http://rechargecolorado.com/

United Nations Environment Programme Water and Sanitation http://www.unep.or.jp/ietc/ws/index.asp

Water and Wastes Digest http://www.wwdmag.com/wwd/

Water Environment Federation http://www.wef.org/

Water Online http://www.wateronline.com/

Western Governors' Association http://www.westgov.org/